

**Appln No. 10/812,287**  
**Reply to Office Action of October 20, 2005**

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.-30. (Cancelled)

31. (Currently Amended) A drill pipe for an oil or gas well comprising:  
a generally cylindrical hollow drill pipe having a length; ~~and~~  
a conductive coating connected to the drill pipe to define an electrical pathway that extends along at least a portion of the length of the drill pipe; ~~and~~  
a second conductive coating connected to the drill pipe to define a second electrical pathway that extends along at least a portion of the length of the drill pipe.

32. (Original) The drill pipe of claim 31, wherein the conductive coating is insulated.

33. (Original) The drill pipe of claim 31, wherein the conductive coating is surrounded by insulative coatings.

34. (Original) The drill pipe of claim 31, wherein the conductive coating extends from an upper end of the drill pipe to a lower end of the drill pipe.

35. (Original) The drill pipe of claim 31, wherein the conductive coating extends along the length of the drill pipe.

36. (Cancelled).

37. (Currently Amended) The drill pipe of claim ~~[[36]]~~31, wherein the second conductive coating is applied over said conductive coating.

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38. (Original) The drill pipe of claim 37, wherein the second conductive coating is insulated from said conductive coating.

39. (Currently Amended) The drill pipe of claim 31, further comprising a plurality of additional conductive coatings connected to the drill pipe to define a plurality of additional electrical pathways that each extend along at least a portion of the length of the drill pipe.

40. (Original) The drill pipe of claim 39, wherein each successive conductive coating in the plurality of conductive coatings is applied over an adjacent one of the plurality of conductive coatings.

41. (Original) The drill pipe of claim 40, wherein each conductive coating in the plurality of conductive coatings is insulated from said adjacent one of the plurality of conductive coatings.

42. (Currently Amended) A method of communicating to downhole oil or gas well equipment comprising:

providing a generally cylindrical hollow drill pipe having a length; ~~and~~  
applying a conductive coating on the drill pipe to define an electrical pathway that extends along at least a portion of the length of the drill pipe; ~~and~~  
further applying a second conductive coating on the drill pipe to define a second electrical pathway that extends along at least a portion of the length of the drill pipe.

43. (Previously Presented) The method of claim 42, further comprising insulating the conductive coating.

44. (Previously Presented) The method of claim 42, further comprising surrounding the conductive coating with insulative coatings.

45. (Previously Presented) The method of claim 42, wherein the conductive coating extends from an upper end of the drill pipe to a lower end of the drill pipe.

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46. (Previously Presented) The method of claim 42, wherein the conductive coating extends along the length of the drill pipe.

47. (Cancelled).

48. (Currently Amended) The method of claim ~~[[47]]~~42, wherein the second conductive coating is applied over said conductive coating.

49. (Original) The method of claim 48, further comprising insulating the second conductive coating from said conductive coating.

50. (Currently Amended) The method of claim 42, further comprising applying a plurality of additional conductive coatings on the drill pipe to define a plurality of additional electrical pathways that each extend along at least a portion of the length of the drill pipe.

51. (Original) The method of claim 50, wherein each successive conductive coating in the plurality of conductive coatings is applied over an adjacent one of the plurality of conductive coatings.

52. (Original) The method of claim 51, wherein each conductive coating in the plurality of conductive coatings is insulated from said adjacent one of the plurality of conductive coatings.

53. (Currently Amended) A drill pipe for an oil or gas well comprising:  
a generally cylindrical hollow drill pipe having a length;  
a conductive coating connected to the drill pipe to define an electrical  
pathway that extends along at least a portion of the length of the drill pipe; and

~~The drill pipe of claim 31,~~ wherein the conductive coating is connected to an inner diameter of the drill pipe.

54. (Original) The drill pipe of claim 53, wherein an insulative coating is connected to the inner diameter of the drill pipe between the inner diameter of drill pipe

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and the conductive coating, and wherein the insulative coating and the conductive coating each extend substantially along the length of the drill pipe.

55. (Currently Amended) A method of communicating to downhole oil or gas well equipment comprising:

providing a generally cylindrical hollow drill pipe having a length;

applying a conductive coating on the drill pipe to define an electrical pathway that extends along at least a portion of the length of the drill pipe wherein the conductive coating extends from an upper end of the drill pipe to a lower end of the drill pipe.; and

~~The method of claim 45, further comprising~~additionally applying an insulative coating to an inner diameter of the drill pipe and applying the conductive coating to the insulative coating such the insulative coating is disposed between the inner diameter of the drill pipe and the conductive coating, and wherein the insulative coating and the conductive coating each extend substantially along the length of the drill pipe.